

AMENDMENTS TO THE CLAIMS

Claims 1-10 (Cancelled)

11. (New) A data transmission apparatus for transmitting data packets, said transmission apparatus comprising:

a transmitter operable to transmit the data packets, said transmitter comprising a priority assignment part, a packet transmitter, a reception state receiver and a packet retransmitter; and

a receiver operable to receive the data packets, said receiver comprising a packet receiver, a reception state transmitter and a retransmission request transmitter,

wherein said priority assignment part is operable to assign priorities to the data packets,

wherein said packet transmitter is operable to transmit a priority-assigned packet,

wherein said reception state receiver is operable to receive information related to a packet reception state of said receiver,

wherein said packet retransmitter is operable to perform packet retransmission in response to a retransmission request from said receiver,

wherein said packet receiver is operable to receive the priority-assigned packet provided by said packet transmitter and to detect packet loss information,

wherein said reception state transmitter is operable to transmit the information related to the packet reception state, which is based on the packet loss information detected by said packet receiver,

wherein said retransmission request transmitter is operable to transmit the retransmission request if any packet of high priority is detected as having been lost, and

wherein said priority assignment part is further operable to change a manner of assigning priorities to the data packets so that a number of times a high priority is assigned is decreased when the packet reception state does not meet a parameter, and the number of times the high priority is assigned is increased when the packet reception state meets the parameter.

12. **(New)** The data transmission apparatus according to claim 11, wherein
said reception state transmitter is operable to transmit the information related to the packet
reception state including information related to a packet loss ratio of packets lost at said packet
receiver, and

said priority assignment part is operable to change the manner of assigning priorities to the
data packets so that the high priority is assigned to a lower ratio of packets when the information
related to the packet loss ratio indicates that the packet loss ratio is larger than a predetermined value,
and so that the high priority is assigned to a higher ratio of packets when the information related to
the packet loss ratio indicates that the packet loss ratio is smaller than the predetermined value.

13. **(New)** The data transmission apparatus according to claim 11, wherein said priority
assignment part is further operable to

classify any packet including coded data derived from moving pictures into an intra-coded
packet carrying intra-frame coded data, or an inter-coded packet carrying inter-frame coded data, and

based on the information related to the packet reception state, change the manner of assigning
priorities to the data packets according to packet type.

14. **(New)** The data transmission apparatus according to claim 13, wherein based on the
information related to the reception state, said priority assignment part is further operable to change
between

a first priority assigning manner wherein intra-coded packets are assigned with a high
priority, and inter-coded packets are assigned with a low priority, and

a second priority assigning manner wherein every packet is assigned with a high priority.

15. **(New)** The data transmission apparatus according to claim 13, wherein based on the
information related to the reception state, said priority assignment part is further operable to change
among

a first priority assigning manner wherein intra-coded packets are assigned with either a high or low priority at a predetermined ratio, and inter-coded packets are assigned with a low priority,
a second priority assigning manner wherein the intra-coded packets are assigned with a high priority, and the inter-coded packets are assigned with a low priority, and
a third priority assigning manner wherein every packet is assigned with a high priority.

16. **(New)** A data transmission method for transmitting data packets from a transmitter to a receiver, said transmission method comprising:

assigning, at the transmitter, priorities to the data packets;
transmitting, from the transmitter, a priority-assigned packet;
receiving, at the transmitter, information related to a packet reception state of the receiver;
performing packet retransmission, at the transmitter, in response to a retransmission request from the receiver;

receiving, at the receiver, the priority-assigned packet and detecting packet loss information;
transmitting, from the receiver, the information related to the reception state of the receiver based on the packet loss information;

transmitting, from the receiver, the retransmission request if any packet of high priority is detected as having been lost,

wherein said assigning priorities comprises changing a manner of assigning priorities to the data packets so that a number of times a high priority is assigned is decreased when the packet reception state does not meet a parameter, and the number of times the high priority is assigned is increased when the packet reception state meets the parameter.

17. **(New)** The data transmission method according to claim 16, wherein
in said transmitting of the information from the receiver, the information related to the reception state includes information related to a packet loss ratio of packets lost at the receiver, and
in said assigning of priorities at the transmitter, the manner of assigning priorities to the data packets is so changed that the high priority is assigned to a lower ratio of packets when the

information related to the packet loss ratio indicates that the packet loss ratio is larger than a predetermined value, and that the high priority is assigned to a higher ratio of packets when the information related to the packet loss ratio indicates that the packet loss ratio is smaller than the predetermined ratio.

18. **(New)** The data transmission method according to claim 16, wherein in said assigning of priorities at the transmitter,

any packet including coded data derived from moving pictures is classified into an intra-coded packet carrying intra-frame coded data, or an inter-coded packet carrying inter-frame coded data, and

based on the information related to the packet reception state, the manner of assigning priorities to the data packets according to packet type are changed.

19. **(New)** The data transmission method according to claim 18, wherein the manner of assigning priorities to the data packets is changed between

a first priority assigning manner wherein intra-coded packets are assigned with a high priority, and inter-coded packets are assigned with a low priority, and

a second priority assigning manner wherein every packet is assigned with a high priority.

20. **(New)** The data transmission method according to claim 18, the manner of assigning priorities to the data packets is changed among

a first priority assigning manner wherein intra-coded packets are assigned with either a high or low priority at a predetermined ratio, and inter-coded packets are assigned with a low priority,

a second priority assigning manner wherein intra-coded packets are assigned with a high priority, and said inter-coded packets are assigned with a low priority, and

a third priority assigning manner wherein every packet is assigned with a high priority.